



## Impacts of flood on health: Epidemiologic evidence from Hanoi, Vietnam

**Author(s):** Bich TH, Quang LN, Ha le TT, Hanh TT, Guha-Sapir D  
**Year:** 2011  
**Journal:** Global Health Action. 4: 6356

### Abstract:

**BACKGROUND:** Vietnam is one of the most disaster-prone countries in the world. The country suffers from many kinds of natural disasters, of which the most common and serious one is flooding. Long and heavy rainfall during the last days of October and the first week of November 2008 resulted in a devastating flood unseen for over three decades in the capital city of Hanoi. It caused a substantial health impact on residents in and around the city and compromised the capacity of local health services. **OBJECTIVE:** The aim of this study is to ascertain the vulnerability and health impacts of the devastating flood in Hanoi by identifying the differences in mortality, injuries, and morbidity patterns (dengue, pink eye, dermatitis, psychological problems, and hypertension) between flood affected and non-affected households. **DESIGN:** A cross-sectional study was carried out involving 871 households in four selected communes (two heavily flood affected and two comparatively less affected) from two severely flooded districts of Hanoi. Participants were interviewed and information collected on the social, economic, and health impacts of the devastation within 1 month after the flood. **RESULTS:** The self-reported number of deaths and injuries reported in this study within 1 month after the heavy rainfall were a bit higher in severely affected communes as compared to that of the less affected communes of our study. The findings showed higher incidences of dengue fever, pink eye, dermatitis, and psychological problems in communes severely affected by flood as compared to that of the controlled communes. **CONCLUSIONS:** For people in flood prone areas (at risk for flooding), flood prevention and mitigation strategies need to be seriously thought through and acted upon, as these people are exposed to greater health problems such as psychological issues and communicable diseases such as pink eye or dermatitis.

**Source:** <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3160808>

### Resource Description

#### Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;  
 surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience:

audience to whom the resource is directed

Public



# Climate Change and Human Health Literature Portal

## Exposure :

weather or climate related pathway by which climate change affects health

Extreme Weather Event

**Extreme Weather Event:** Flooding

## Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

## Geographic Location:

resource focuses on specific location

Non-United States

**Non-United States:** Asia

**Asian Region/Country:** Other Asian Country

**Other Asian Country:** Vietnam

## Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Dermatological Effect, Infectious Disease, Injury, Mental Health/Stress, Other Health Impact

**Cardiovascular Effect:** Other Cardiovascular Effect

**Cardiovascular Disease (other):** Hypertension

**Infectious Disease:** General Infectious Disease, Vectorborne Disease

**Vectorborne Disease:** Mosquito-borne Disease

**Mosquito-borne Disease:** Dengue

**Mental Health Effect/Stress:** Stress Disorder

**Other Health Impact:** Pink eye

## Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

**Population of Concern:** A focus of content

## Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status

## Resource Type:

# Climate Change and Human Health Literature Portal



format or standard characteristic of resource

Research Article

## **Timescale:**

time period studied

Time Scale Unspecified

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content